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Research Article

Cyber-bullying among in-school Adolescents: Prevalence and Coping Strategies across Gender

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Abstract

Objective: In the technology-driven world nowadays, bullying has transcended the in-person to the cyberspace. Cyber-bullying can occur through email and text messages, chat rooms, social media, or instant messaging, and via unwelcome distribution of photos or videos, exclusion from online social networks, or theft of online identity. Cyber-bullying has caused a degeneration in the academic performance of numerous adolescents and the key variable that this study focused on is gender. Coping strategies have been developed to help adolescents withstand the trauma of cyber-bullying, and prominent ones include seeking support from parents and peers, confronting or ignoring the cyber bully. The purpose of the study is to determine the number of male and female students that experience cyber bullying in secondary schools in Anambra State, Nigeria.

Methods: Data for the study was collected through a survey of a sample of 1,123 in-school adolescents in gender-mixed secondary schools in Anambra State, Nigeria. The research instrument was adapted from Corcoran's (2013) instrument that dealt with incidence and coping strategies of cyber-bullying. The sampling technique used was proportionate stratified random sampling. Data was analyzed using standard deviation.

Results: The findings indicate that cyber-bullying was prevalent among in-school adolescents in Anambra State secondary schools in Nigeria. The implication of this finding is that the availability and usage of social media has opened up avenues for people to indulge in a lot of negative activities that can be injurious to others.

Conclusion: It is concluded that there is a prevalence of in-person cyberbullying among adolescents in Anambra State Secondary Schools. It is also verified that female adolescents in Anambra State experience cyber-bullying more than their male counterparts.

Keywords: cyber-bullying, adolescence, coping strategies

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1 INTRODUCTION

1.1 Cyber-Bullying Among in-School Adolescents: Prevalence and Coping Strategies across Gender

Adolescence is a period characterized by significant changes and challenges. It is a vital stage that determines how a person will view and interact with the world as an adult. There is an increased desire among adolescents to belong to a group with increased susceptibility to peer influences on decision-making^[1]. Social orientation, at this stage, shifts from parents to peers, thus making the adolescent rely heavily on peers for social support^[2] coupled with increasing pressures to attain social status. Some researchers believe that the pressure to gain peer acceptance and status may be related to an increase in teasing and bullying^[3]. Peers provide the relational context for bullying (especially adolescents) as bullying often occurs within groups of peers, and peers can play multiple roles in promoting or preventing bullying^[4].

Bullying is one form of youth violence and aggressive behavior^[5] characterized by consistent mistreatment of an individual, by one with an advantage in strength and power. Over the past two decades, in developed and some developing countries, an extensive body of research has documented that bullying is a potentially damaging form of violence among children and youths^[6]. While bullying is not a new phenomenon, what is new is the growing awareness that bullying has serious damaging effects for bullies, victims, schools and communities. Consequently, "concerns of parents, policymakers, educators and the public have escalated in countries around the world with the rise in the reported incidents of violence and the links that have been established between violence and bullying"^[6].

In the western world much attention has been devoted to stemming the act of bullying but in Nigeria this act goes on in many schools unnoticed. This may be attributed to paucity of empirical evidence on bullying incidence across states and schools. However, the problem of bullying is becoming a recent topic of national conversation because of recent occurrences of cult in-fighting, suicides and suicidal ideations among Nigerian adolescents^[7]. At the center of the discourse is that bullying is no longer limited to in-person encounters, but has come to include cyberspace encounters, which take place indirectly over electronic media, thus making bullying phenomena more viral and dangerous.

1.2 Cyber-bullying Among in-school Adolescents: The Nigerian Context

Cyber-bullying is becoming a common phenomenon in Nigeria as more people engage in it especially on social media platforms^[8] though the realization of its proliferation in the country came in the last decade. In this electronic age, cyber platforms multiply at an astonishing rate, all attracting the youth in large numbers, and posing the risk that they may become subject to cyber-bullying. Far from being limited to those individual learners being cyber-bullied, the effects of this phenomenon extend to the learner, the school climate, and also the entire school system, management and education, thus requiring an urgent response.

Hinduja and Patchin^[9] defined cyber-bullying as the "willful and repeated harm inflicted through the use of computers, cell phones, and other electronic devices". Cyber bullying encompasses a variety of deliberate and repeated actions against another person. What distinguishes cyber-bullying from traditional bullying is the electronic means used to enact aggression. Cyber-bullying can occur through email and text messages, chat rooms, social media, or instant messaging, and via unwelcome distribution of photos or videos, exclusion from online social networks, or theft of online identity^[10].

Strangely, studies of cyber-bullying have found that the number of victims is typically two to three times greater than the perpetrators. It could be speculated that a single cyberbully victimizes multiple targets at once via cyberspace, thus creating a disproportionate number of victims to perpetrators^[11]. Little research on cyber-bullying in Nigeria^[12,13], though done mainly in the South West (specifically Oyo and Osun States) and South South (Benin State) geo-political regions of Nigeria, indicates growing incidence of this phenomenon. The National Assembly of Nigeria pragmatically responded to this emergence of cyber-bullying by promulgating the Cybercrimes (Prohibition, Prevention, etc.) Act in 2015^[8], which uses the word "cyber stalking" to denote cyber-bullying. Cyber stalking is defined in the Cybercrimes Act as any course of conduct directed at a specific person that would cause a reasonable person to feel fear. According to the provisions of the Act, the transmission of any communication through the means of a computer to bully, threaten or harass another person where such communication places another person in fear of death, violence or bodily harm amounts to cyber stalking. Adediran^[7] noted that there have been reported cases where victims of cyber-bullying have committed suicide as a result of fear or shame. A major observation is that cyber-bullying has gained normalcy and many internet users engaged in it do not seem to be aware of the criminal connotation of their actions.

There are many detrimental outcomes associated with cyber-bullying that reach into the real world. First, many cyber-bullying targets report feeling depressed, sad, angry, and frustrated^[9,14,15], and these emotions are correlated with delinquency and interpersonal violence among youth^[16]. Cyber-bullying is a growing problem because increasing adolescents are using and have wholly embraced interactions via computers and cell phones. Two-thirds of youth go online every day for school work, to keep

in touch with their friends, to play games, to learn about celebrities, to share their digital creations, or for many other reasons^[17]. Several factors can influence adolescents' involvement in cyber-bullying. Age and gender are often the most influential factors for engaging in cyberbullying behavior^[18,19]. Research findings suggest that cyber-bullying is most prevalent among older adolescents than younger adolescents. Hinduja and Patchin^[9] found that cyber perpetrators are most likely to be older youths, specifically 16 to 17 years old. Furthermore, in a study by Mesch^[20], the victims of cyber-bullying were also found to be older youths, somewhere in the 14- to 17-yearold range. Victims of cyber-bullying sometimes report having a negative perception of school, and 44.7% admit they absented themselves from school at least once in the previous year^[16].

The negative impact of cyber-bullying on the mental and physical health of children and adolescents is substantial^[21]. This impact can, however, be mitigated, at least to some extent, by the application of beneficial coping strategies^[22].

1.3 Cyber-bullying Coping Strategies

Individuals manifest certain behaviors / conducts and engage in certain thought processes in the face of pressure and changing life situations. These emotional and cognitive responses, which are varied and diverse, are strategies used by each individual to cope. Coping, according to Folkman^[23] has two main functions: changing the terms of the person-setting; relation that existed when stress began (problem-centered coping) and controlling emotional troubles (emotional-centered or cognitioncentered coping).

Cyber-bullying victims use different responses as coping strategies which Parris, Meyer and Conner (2012) ^[24], classify into these four categories: (1) responses that address the cyber-bully, such as taking reprisals; (2) those that imply ignoring the aggressor; (3) the support-seeking kind (from peers, parents, or teachers); and (4) those that attempt to use technical cybernetic techniques to block the bully's account. In a sample from mainland China, Zhou et al.^[25] reported that 46% ignored / did not react, 36% talked about the experience / sought help (of these, from classmates / friends 66%, parents 29%, siblings 28%, teachers 3%), 32% deleted the materials, 25% changed their online account, and 12% sought revenge. In a Swiss study, Machmutow et al.^[21] found a different set of coping strategies for cyber-bullying, including distant advice, assertiveness, helplessness, close support, and retaliation, based on a factor analysis of coping items. They found that over time, support seeking from peers and family was associated with reduced depression, while assertive coping strategies (such as finding and contacting the bully) were associated with increased depression. There are certain gender inclinations to cyber-bullying with their coping strategies.

Findings from research on influence of gender on cyber-bullying in western countries appear to be divided. Some studies suggest that males are most likely to be a cyber-bully^[14,19,26], while others posit cyber-bullies tend to be female^[18,27], and yet other studies find that males and females engage in cyber-bullying perpetration equally^[28,29]. The majority of studies examining cyber victimization have found females report a significantly higher rate of victimization than males^[14,18,20,27,30]. The most consistent gender difference in coping strategies appears to be in a greater willingness of girls to seek social support. The likelihood of telling a teacher is greater among girls and younger pupils^[31]. Girls and younger children are more likely to talk about unpleasant situations online^[32]. What is the gender situation concerning incidence rate and coping strategies in developing countries like Nigeria?

Nigeria and, particularly, Anambra State, has recently been witnessing an ugly trend of adolescents gravitating towards cultism and forcing unwilling peers to join. As at the time of this study, Anambra State in South-east Nigeria is experiencing shootings and in-fighting among young and older adolescents. This may be the resultant effect of bullying they experienced or are still experiencing and finding it hard to handle appropriately. The evidence on cyber-bullying in Nigeria in literature is mainly from western and mid-western parts of the country. It has been observed that some school children in the south-eastern part of the country where Anambra State belongs suddenly drop out of school, some show lack of interest in school tasks and activities, while some tend to achieve below their potential. These negative incidents may be caused by either physical or psychological variables like cyberbullying. Cultism, which is one major Nigerian arm of bullying, has recently distilled from higher institutions to secondary education institutions exacerbating the issue of an unhealthy school environment with its attendant poor school engagement. The major question begging answer is, what is the incidence rate of cyber-bullying and coping strategies by adolescents in secondary schools in Anambra State?

This study determined:

1. The percentage of adolescents that experience cyberbullying in secondary schools in Anambra State, Nigeria.

2. The percentage of male adolescents that experience cyber-bullying in secondary schools in Anambra State, Nigeria.

3. The percentage of female adolescents that experience cyber-bullying in secondary schools in Anambra State, Nigeria.

4. The coping strategies of adolescents that experience cyber-bullying in secondary schools in Anambra State,

Table 1. Percentage of Adolescents that Experienced Cyber-	bullying in Anambra State Secondary
Schools, Nigeria (N=1123)	

Cyber-bullying	Demonstrate In al damos	Upsetting Level of Cyber-bullying Experience				
Experience	Percentage Incidence —	No	No A Little			
Yes	507 (45.1%)	218 (42.9%)	109 (21.5%)	180 (35.5%)		
No	616 (54.9%)					

Table 2. Percentage of Male Adolescents that Experienced Cyber-bullying in Anambra State Secondary Schools, Nigeria (*N*=532)

Cyber-bullying	Demonsteres In st demos	Upsetting Level of Cyber-bullying Experience				
Experience	Percentage Incidence —	No	A Lot			
Yes	308 (57.9%)	77 (25%)	196 (63.6%)	35 (11.4%)		
No	224 (42.1%)					

Nigeria.

5. The coping strategies of male adolescents that experience cyber-bullying in secondary schools in Anambra State, Nigeria.

6. The coping strategies of female adolescents that experience cyber-bullying in secondary schools in Anambra State, Nigeria.

2 METHODS

2.1 Design

The study adopted a descriptive survey design. Data for the study was collected through a survey of a sample of 1,123 in-school adolescents in gender-mixed secondary schools in Anambra State, Nigeria. Through proportionate stratified random sampling, an equitable mix of male and female adolescents were selected who made up the 1,123-sample size for the research instrument.

During our data-collection process we sought the consent of the respondents by explaining in writing the essence of the study and giving them the opportunity to quit the study if they so desired. First, we obtained permission from the school administration and explained the purpose of the study and how it may assist in the more effective implementation of inclusive education. With the authorization, we approached the teachers in their general staff rooms. After describing the purpose of the study, 20 teachers from each school were recruited. The three questionnaires were given to the respondents and included demographic information such as gender, age, and years of experience. The questionnaires were framed in English because it is the primary language of instruction in all Anambra State Secondary schools. The questionnaire took approximately 20min to complete, and the researchers collected the completed questionnaires right away. This resulted in a high completion rate. Approval for the research protocol was obtained through the Faculty of Health Sciences and Technology Ethical Committee (NAU / FHST / 2021 / MRH135). We ensured confidentiality by making sure that there was no marker of identification of the teachers in the questionnaire. For instance, there was no provision made for including the name of the teachers, their identification numbers and the names of their schools.

2.2 Data Collection Tool

The research instrument was adapted from Corcoran's^[33] instrument that dealt with incidence and coping with cyberbullying. The instrument was divided into two major parts. Part one was tagged "about you", which was made up of demographic information. Part two was captioned "cyber problems with other kids", which comprised items on incidence of cyber-bullying and its coping strategies. This part was divided into two sections. Section one contains items on incidence of cyber-person bullying. In this section, the adolescents were expected to answer "Yes" or "No" to items on whether other kids said or did mean things to them in the past year on cyber platforms. Secondly, for those that said "Yes", they were also expected to respond further to whether the experience was upsetting or not to them. Section two contains items on coping strategies of cyberbullying. The scale used for this section is "Not at all" (1), "Rarely" (2), "Sometimes" (3) and "Often" (4).

2.3 Data Analysis

Percentages, mean and standard deviation were used to answer research questions formulated for the study.

3 RESULTS

3.1 Research Question One

What is the percentage number of adolescents that experience cyber-bullying in secondary schools in Anambra State, Nigeria? (Tables 1-3)

A total of 45.1% of the respondents affirmed cyberbullying incidence while 54.9% of the adolescents did not have such experience in the year studied. Almost one third of the adolescents that experienced bullying were affected by it a lot.

Table 3. Percentage of Female Adolescents that Experienced Cyber-bullying in Anambra State Secondary Schools (*N*=591)

Cyber-bullying	Demonstrage Instidence	Upsetting Level of Cyber-bullying Experience				
Experience	Percentage Incidence —	No	No A Little A			
Yes	199 (33.7%)	48 (24.1%)	97 (48.7%)	54 (27.1%)		
No	392 (66.3%)					

Table 4. Mean and Standard Deviation Scores of Coping Strategies of Adolescents that Experience Cyber-bullying in Secondary Schools (*N*=507)

S/N	Item Statement I would	Variables	x	SD	Remarks
1	Tell a friend or family member what happened	Cyber-bullying	3.02	0.92	Sometimes
2	Try to think of different ways to solve it	Cyber-bullying	2.99	0.96	Sometimes
3	Make believe nothing happened	Cyber-bullying	2.52	1.07	Sometimes
4	Do to that person what they did to me Because I felt sad or angry	Cyber-bullying	2.74	1.01	Sometimes
5	Talk to somebody about how it made me feel	Cyber-bullying	2.95	1.02	Sometimes
6	Change something so things would work out	Cyber-bullying	2.72	0.96	Sometimes
7	Think about happy things to take my mind off the problem or how I was feeling	Cyber-bullying	2.74	1.03	Sometimes
8	Get help from a friend	Cyber-bullying	2.92	0.98	Sometimes
9	Decide on one way to deal with the problem and do it	Cyber-bullying	2.93	0.97	Sometimes
10	Forget the whole thing	Cyber-bullying	3.07	0.84	Sometimes
11	Ask a friend for advice	Cyber-bullying	3.11	0.83	Sometimes
12	Tell myself it doesn't matter	Cyber-bullying	3.21	0.78	Sometimes
3	Ask a family member for advice	Cyber-bullying	3.12	0.81	Sometimes
14	Know there were things I could do to make it better	Cyber-bullying	3.27	0.77	Sometimes
15	Refuse to think about it	Cyber-bullying	3.22	0.85	Sometimes
16	Yell at that person to let off steam	Cyber-bullying	3.29	0.69	Sometimes
17	Ask another kid who had this problem what he or she did	Cyber-bullying	3.17	0.77	Sometimes
18	Go over in my mind what to do or say	Cyber-bullying	2.98	0.93	Sometimes
19	Do something else to take my mind off of it	Cyber-bullying	2.74	0.99	Sometimes
20	Imagine something really fun or exciting happening in my life	Cyber-bullying	2.97	0.98	Sometimes
21	Curse at that person	Cyber-bullying	2.79	1.04	Sometimes
22	Try to understand why it happened to me	Cyber-bullying	2.59	1.07	Sometimes
23	Say I don't care	Cyber-bullying	2.84	0.96	Sometimes
24	Ignore it when people say something about it	Cyber-bullying	2.93	0.91	Sometimes
25	Get mad at the person and throw something at them or hit them	Cyber-bullying	2.88	0.87	Sometimes
26	Get help from a family member	Cyber-bullying	2.93	0.94	Sometimes
27	Talk to the teacher, counselor, or another adult at school about it	Cyber-bullying	2.94	0.94	Sometimes
	Cluster Means	Cyber-bullying	2.88		Sometimes

More than half of the male adolescents studied (57.9%) have had cyber-bullying experience in the year under study and a large number of them were upset about the experience 63.6%, a little; 11.4%, a lot).

Data in Table 3 indicate that less than half of the female

adolescents (33.7%) experienced cyber-bullying within the study period and majority of those that had such experience were upset by it 75.8%).

Table 4 shows that the adolescents that experienced cyber-bullying used varying strategies to cope with it

S/N	Item Statement I would	Variables	N	x	SD	Remarks
1	Tell a friend or family member what happened	Cyber-bullying	308	2.65	0.96	Sometimes
2	Try to think of different ways to solve it	Cyber-bullying	308	2.61	1.14	Sometimes
3	Make believe nothing happened	Cyber-bullying	308	2.15	0.98	Rarely
4	Do to that person what he/she did to me because I felt sad or angry	Cyber-bullying	308	2.35	0.89	Rarely
5	Talk to somebody about how it made me feel	Cyber-bullying	308	2.62	1.01	Sometimes
6	Change something so things would work out	Cyber-bullying	308	2.91	1.01	Sometimes
7	Think about happy things to take my mind off the problem or how I was feeling	Cyber-bullying	308	2.57	1.01	Sometimes
8	Get help from a friend	Cyber-bullying	308	2.59	1.10	Sometimes
9	Decide on one way to deal with the problem and do it	Cyber-bullying	308	2.56	1.08	Sometimes
10	Forget the whole thing	Cyber-bullying	308	3.36	0.73	Sometimes
11	Ask a friend for advice	Cyber-bullying	308	3.31	0.75	Sometimes
12	Tell myself it doesn't matter	Cyber-bullying	308	3.32	0.74	Sometimes
13	Ask a family member for advice	Cyber-bullying	308	3.24	0.76	Sometimes
14	Know there were things I could do to make it better	Cyber-bullying	308	3.33	0.76	Sometimes
15	Refuse to think about it	Cyber-bullying	308	3.27	0.90	Sometimes
16	Yell at that person to let off steam	Cyber-bullying	308	3.38	0.59	Sometimes
17	Ask another kid who had this problem what he or she did	Cyber-bullying	308	3.28	0.67	Sometimes
18	Go over in my mind what to do or say	Cyber-bullying	308	2.15	0.98	Rarely
19	Do something else to take my mind off of it	Cyber-bullying	308	2.92	0.94	Sometimes
20	Imagine something really fun or exciting happening in my life	Cyber-bullying	308	3.38	0.71	Sometimes
21	Curse at that person	Cyber-bullying	308	3.16	0.77	Sometimes
22	Try to understand why it happened to me	Cyber-bullying	308	2.78	1.05	Sometimes
23	Say I don't care	Cyber-bullying	308	3.07	0.87	Sometimes
24	Ignore it when people say something about it	Cyber-bullying	308	3.34	0.70	Sometimes
25	Get mad at the person and throw something at them or hit them	Cyber-bullying	308	3.09	0.74	Sometimes
26	Get help from a family member	Cyber-bullying	308	3.19	0.75	Sometimes
27	Talk to the teacher, counselor, or another adult at school about it	Cyber-bullying	308	3.24	0.74	Sometimes
	Cluster Means	Cyber-bullying		2.88		Sometimes

Table 5. Mean and Standard Deviation Scores of Coping Strategies of Male Adolescents that Experience Cyber-bullying in Secondary Schools

but the most popular among these strategies which are sometimes used by them are: knowing there are things they could do about the experience (mean=3.27), refusing to think about it (mean=3.22), and yelling at the person to let off steam (mean=3.29).

It was evident from Table 5 that the male adolescents who experienced cyber-bullying used most of the identified strategies to cope and there was very little difference in their individual responses.

Data in Table 6 showed the item-by-item analysis of

the coping strategies of female adolescents that experience cyber-bullying in secondary schools in Anambra State. The analysis revealed that all the coping strategies listed in Table 6 except item No.76 with a mean score of 2.48 were coping strategies sometimes used by female adolescents in cyber-bullying in secondary schools in Anambra State. The standard deviation scores ranging from 0.69-1.13 indicated that the respondents' opinions are closely related concerning their coping strategies for cyber-bullying.

4 DISCUSSION

Research participants were asked whether cyber-

S/N	Item Statement I would	Variables	N	x	SD	Remarks
1	Tell a friend or family member what happened	Cyber-bullying	199	2.78	0.69	Sometimes
2	Try to think of different ways to solve it	Cyber-bullying	199	3.24	0.73	Sometimes
3	Make believe nothing happened	Cyber-bullying	199	2.77	0.98	Sometimes
1	Do to that person what he/she did to me because I felt sad or angry	Cyber-bullying	199	2.98	0.89	Sometimes
5	Talk to somebody about how it made me feel	Cyber-bullying	199	3.15	0.87	Sometimes
)	Change something so things would work out	Cyber-bullying	199	2.91	0.86	Sometimes
7	Think about happy things to take my mind off the problem or how I was feeling	Cyber-bullying	199	2.84	0.76	Sometimes
;	Get help from a friend	Cyber-bullying	199	3.13	0.82	Sometimes
1	Decide on one way to deal with the problem and do it	Cyber-bullying	199	3.16	0.85	Sometimes
0	Forget the whole thing	Cyber-bullying	199	2.88	0.85	Sometimes
1	Ask a friend for advice	Cyber-bullying	199	2.98	0.86	Sometimes
2	Tell myself it doesn't matter	Cyber-bullying	199	3.14	0.80	Sometimes
3	Ask a family member for advice	Cyber-bullying	199	3.04	0.83	Sometimes
4	Know there were things I could do to make it better	Cyber-bullying	199	3.23	0.78	Sometimes
5	Refuse to think about it	Cyber-bullying	199	3.19	0.82	Sometimes
6	Yell at that person to let off steam	Cyber-bullying	199	3.24	0.74	Sometimes
7	Ask another kid who had this problem what he or she did	Cyber-bullying	199	3.10	0.82	Sometimes
8	Go over in my mind what to do or say	Cyber-bullying	199	3.14	0.87	Sometimes
9	Do something else to take my mind off of it	Cyber-bullying	199	2.62	1.02	Sometimes
20	Imagine something really fun or exciting happening in my life	Cyber-bullying	199	2.71	1.04	Sometimes
1	Curse at that person	Cyber-bullying	199	2.56	1.13	Sometimes
2	Try to understand why it happened to me	Cyber-bullying	199	2.48	1.07	Rarely
3	Say I don't care	Cyber-bullying	199	2.69	0.98	Sometimes
4	Ignore it when people say something about it	Cyber-bullying	199	2.66	0.93	Sometimes
5	Get mad at the person and throw something at them or hit them	Cyber-bullying	199	2.74	0.92	Sometimes
6	Get help from a family member	Cyber-bullying	199	2.76	1.02	Sometimes
7	Talk to the teacher, counselor, or another adult at school about it	Cyber-bullying	199	2.74	0.92	Sometimes
	Cluster Means	Cyber bullying		2.99		Times

Table 6. Mean and Standard Deviation Scores of Coping Strategies of Female Adolescents thatExperience Cyber-bullying in Secondary Schools

bullying happened to them last year. The response set for the question on cyber-bullying experience was "Yes" and "No". Table 1 shows data analysis for all the adolescents who had cyber-bullying experience last year with a 45.1% positive response. This indication of prevalence of cyber-bullying among adolescents could be because the present-day adolescents are digital natives and communicate more on digital platforms than on physical levels. Bullies will, therefore, reach their victims more on digital spaces and their bullying tactics will go more viral on those platforms, affecting their victims more. This finding supports the finding of Ryan et al.^[34] that over three-quarters of all samples were concerned about cyber-bullying and viewed it as a problem for students in schools in Turkey and Ontario. This is perhaps due to the recent increase in the number of computers, the increasing availability of the internet (Wi-Fi), and improved hand-held communications devices.

To determine how upsetting the cyber-bullying experience was for those that positively affirmed its occurrence to them, three levels of response were used which include: "No", "A little" and "A lot." Out of the 45.1% adolescents who affirmed that cyber-bullying happened to them last year, 42.9% of them were not upset at all about the experience, 21.5% were a little upset while 35.5% of them were upset a lot about it. This finding means that some percentage of bully victims are really affected by cyber-bullying which can have negative and detrimental psychological effects on them. This finding supports the finding of Omoteso^[6] that as a result of bullying activities in schools, 63.6% and 58.1% of students being bullied exhibited fear and depression respectively.

Table 2 shows that 57.9% of the male respondents agreed to having experienced cyber-bullying with 63.6% and 11.4% respectively being a little upset and a lot upset about the experience. 66.3% of the female respondents indicated having cyber-bullying experience last year (Table 3) and while 48.7% of them were a little upset about the experience, 27.1% of them were a lot upset.

5 CONCLUSION

The findings indicate that there is prevalence of cyberbullying among in-school adolescents in Anambra State secondary schools in Nigeria. The study concludes that the adolescents that experience cyber-bullying were severely upset by it. Concerning gender variables, the study concludes that female adolescents experience cyber-bullying more than their male counterparts and more of the females are a lot more upset concerning bullying than males. The implication of this is that the females, by their nature, may tend to evade physical confrontations and lean more on virtual types of bullying via social media.

Furthermore, the study concludes that the adolescents use similar coping strategies for cyber-bullying but the rate of use for a few coping strategies vary both among the adolescents as a whole and on gender lines. The implication of the findings of the study is that the pressure in the society, especially lack of employment by youths that have graduated from either secondary education or tertiary education, is negatively affecting the adolescents. As they witness crimes increasing in the society, they tend to perpetrate the same in their interaction zones which is mainly the school environment. Prevalence of cyber-bullying experience, implies that the availability and usage of social media with its attributes of anonymity, making information viral, opportunity for identity faking and not limited by time has opened up avenues for people to indulge in a lot of negative activities that can be injurious to others. With the adolescents' easy possession of mobile phones and lack of maturity on how to use some of the applications therein wisely, there will be an increase in some negative activities like cyber-bullying.

Generally, the adolescents who experienced bullying used more diplomatic, non-violent coping strategies than violent types such as retaliation / revenge. This implies that some of the violence being witnessed currently in Anambra State, Nigeria may not be as a result of bullying experience but may be attributed to other factors like the current economic hardship and unemployment rate in the State.

5.1 Recommendations

1. The findings of the study indicate prevalence of cyber-bullying among adolescents which necessitates that school guidance counselors should explore and offer cyber-bullying counseling services to in-school adolescents.

2. School policies that stress the inculcation of values of care, kindness and forgiveness should be made.

3. Teaching and non-teaching staff should be encouraged to undergo professional training on cyber-bullying.

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Conflicts of Interest

The authors declared no conflict of interest.

Author Contribution

Nwosu KC supervised the work. Kodichukwumma UR and Agu NN performed the data analysis and drafted the manuscript. All the authors contributed to writing the article, read and approved its submission.

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